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RCRA FACILITY ASSESSMENT
SAMPLING PLAN

Dico Oil Corporation
1845 East Willow Street
Signal Hill, CA 90806
CAD 980 737 076

California Environmental Protection Agency
Department of Toxic Substances Control
Region 3
1011 North Grandview Avenue
Glendale, CA 91201

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Waste Management Engineer

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I. OBJECTIVE OF SAMPLING EFFORT

The Sampling Visit (SV) is the last step of the three-step RCRA Facility Assessment (RFA) process designed to identify releases at RCRA Facilities. The SV focuses on collecting additional sampling information to fill data gaps that remain upon completion of the Preliminary Report (PR) and Visual Site Inspection (VSI). This additional information will enable the investigator to make release determinations in the RFA.

The completion of the SV allows the investigator to have also completed the first phase of the RCRA corrective action process, and should have identified releases or potential releases requiring further investigation at a facility.

II. BACKGROUND

On March 15, 1994, a Preliminary Review (PR) was completed. This report identified potential releases at the Dico Oil facility. As a result of this review eighteen solid waste management units (SWMUs) were identified. In order to gather more necessary information to assess and characterize the SWMUs and their potential releases, it was recommended that a Visual Site Inspection (VSI) be conducted on the entire Facility. This VSI was conducted on March 28, 1994.

After conducting the VSI at the Facility, all SWMUs were identified as "low, medium or high" level of concern on Table 1. of the Preliminary Review. The SWMUs were visually verified and based on past sampling activity as having potential soil contamination. To obtain additional information on soil contamination at the Facility, subsurface soil samples eight inches to two feet below ground surface (bgs) were collected in areas identified as "medium or high" concern on Table 1. in the PR and also in some areas where possible soil contamination was visually noted in the VSI.

III. POTENTIAL CONTAMINANTS/HAZARDS ON-SITE

A. CHEMICAL HAZARDS:

Potential Hazards discovered through sampling activity:

- soil contaminated with polychlorinated biphenyl (PCBs)
- waste oil containing
- soil contaminated with total petroleum hydrocarbons (TPH)

Other Chemical Hazards:

- Emulsifying Agent

B. PHYSICAL HAZARDS:

Expected Rainfall of 1 to 2 inches.

IV. RATIONALE FOR SAMPLE LOCATIONS

Certain areas of the Facility were targeted for closer inspection as a result of the PR and the VSI done for the Facility. The sampling rationale at the Facility was based on past sampling results, historical operating practices and a visual inspection of the Facility.

V. DEPARTMENT OF TOXIC SUBSTANCES CONTROL SAMPLING TEAM

Project Leader

Photographs	Yvonne Sanchez, Waste Management Engineer (WME)
Main Sampler	Craig Christmann, Associate Engineering Geologist (AEG)
Back-up Sampler	Ricardo San Miguel, Associate Hazardous Material Specialist (AHMS)
Documenters	Yvonne Sanchez, WME Craig Christmann, AEG
Decontamination	Carolina Green, WME

VI. EQUIPMENT FOR IN SITU MEASUREMENTS/HEALTH AND SAFETY MONITORING

A. Sampling Equipment

All field equipment that will be used for obtaining in-situ measurements must be calibrated prior to the investigation and at regular intervals during use. The Photo ionization Detector (HNU) for health and safety monitoring must also be calibrated. The list of equipment that was utilized for the Dico Oil site sampling:

B. Equipment

1. Tyvek Coveralls
2. Safety goggles
3. Hard Hats
4. Nitrile Gloves
5. Rubber gloves for liners
6. HARP form
7. Film
8. HNU - 10.2 vapor probe
9. Water
10. Measuring Tape
11. Ear Protection
12. Camera
13. Clipboard

C. Sampling Equipment

1. De-ionized water
2. Ice Chest w/ice
3. Alconox
4. 3 buckets - 5 gallons
5. Brass Sleeves
6. Plastic Bags (2 type: sealed & unsealed for samples)
7. Soil Hand Auger
8. 2 brushes - Scrub Brush (for decon of sampling equipment)
9. Paper towel
10. Dry Eraseboard & Marker
11. Plastic end caps

12. Scissors
13. Teflon liners (2 for each sleeve)
14. Plastic bags (for disposal of decon equipment and ground covering)
15. Drive Sampler

VII. SITE SAFETY PLAN

Included as Attachment #1 is the California Environmental Protection Agency, Department of Toxic Substances Hazard Appraisal and Recognition Plan (HARP) Document including a map to the nearest Hospital.

VIII. ANALYSIS PROCEDURES

Soil samples collected at the site will be analyzed by the California Environmental Protection Agency, Department of Toxic Substances Control Hazardous Materials Laboratory (HML). The laboratory address is:

Department of Toxic Substances Control
Hazardous Material Laboratory - Southern California
1449 West Temple Street
Los Angeles, CA 90026

The methodologies that will be used for the soil samples collected is described in Section 4.1 of the HML Users Manual. See Attachment #2.

IX. SAMPLING METHODS AND PROCEDURES

A. The lead sampler and assistant will suit up in level D for the soil sampling. Each sample will be extracted to a depth of eight to ten inches below ground surface (bgs) in order to obtain an undisturbed sample.

B. Prior to any sampling an HNU will be used when appropriate to monitor potential hazardous constituents in the ambient air.

C. Nine Soil sample locations (including one background sample) will be located prior to sampling visit. Co-located samples will be given to the facility, if requested, for each sample taken by the Department sampling team. See *Attachment #3 for map of sample locations and decontamination area.*

D. Samples will be doubled bagged and pre-labeled with: I.D. number, date, time, and location where sample was collected. All samples will be collected in decontaminated sleeves prior to transport to the HML Laboratory. The samples will be photographed and each ample will be handled following proper chain of custody procedures until arrival at the HML Laboratory.

X. SAMPLE DOCUMENTATION

Samples collected during the inspection will be doubled bagged and labeled with: I.D. number, date, time, and location where sample was collected. All samples will be collected in decontaminated sleeves prior to transport to the HML Laboratory. The samples will be photographed and each sample will be handled following proper chain of custody procedures including sealing samples with chain-of-custody tape until arrival at the HML Laboratory.

XI. EQUIPMENT DISPOSAL AND DECONTAMINATION PROCEDURE

A. An area will be established at the site and designated as the decontamination zone in order to decontaminate sampling equipment and sampling team as needed during the sampling activity.

B. Once a sample has been taken, proper decontamination procedures will be followed. This procedure includes washing the equipment with Alconox soap and rinse of fresh water followed by a rinse of de-ionized water and then dried with paper towel. The Alconox detergent used will degrease any particles that will adhere to the surface of equipment and oxidize degradable organic compounds.

C. Other decontamination procedures will include removing protective coverings from sampling team, placing them in plastic bags, proper disposal of sampling rinsate during and after sampling activity.

D. Any equipment with soil or liquid residues will be brushed or wiped off at the sample collection point using a paper towel. Any disposable equipment and personnel protective equipment will be placed in a plastic bag and disposed of in accordance with Department policy.

E. Personnel protective clothing will be removed using the step-off method. Any equipment used in sampling will be decontaminated before and after taking the samples at the Facility.

XII. SAMPLE PRESERVATION

All samples will be placed in a decontaminated ice chest and co
will be doubled bagged and sealed with chain-of-custody
contamination.

XII. SAMPLE PRESERVATION

All samples will be placed in a decontaminated ice chest and cooled using ice. Samples will be doubled bagged and sealed with chain-of-custody tape to prevent cross contamination.

XIII. SHIPMENT

Samples will be stored immediately after collection in an ice chest at 4° C for shipment. They will be delivered to the HML under chain-of-custody and signed over to the lab. The Department's Chain of Custody and Sample Collection form will be used to track the sample from collection through analysis. See Attachment #2.

XIV. QUALITY ASSURANCE/QUALITY CONTROL

One background sample (BG), will be taken in an undisturbed area off-site. The BG sample will be collected and packaged in the same manner as other samples mentioned previously.

All samples will include sufficient quantity to allow for laboratory quality control samples and therefore need not be specifically addressed in this workplan.

All analyses will be subject to quality assurance procedures defined by the HML Quality Assurance Program, as referenced in Section 5.0 of the HML Users Manual. Included as Attachment #4 is Section 5.0 of the HML Users Manual.

XV. ATTACHMENTS

Attachment #1 (6 pages)

Department of Toxic Substances Control Hazard Appraisal and R
Document

Attachment #2 (27 pages)

HML Users Manual, Section 4.1, "Hazardous Materials Labora

Attachment #3

Map of site including sampling locations and decontamination

Attachment #4 (7 pages)

HML Users Manual, Section 5.0, "Quality Control (7 pages)